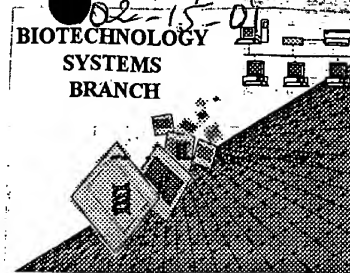# RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: *09/727,030*

Source: *O/PE*

Date Processed by STIC: *12/12/2000*

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin30help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER VERSION 3.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.
Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).
Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

<u>Checker Version 3.0 can be down loaded from the USPTO website at the following address:</u>
http://www.uspto.gov/web/offices/pac/checker

ERROR DETECTED   **SUGGESTED CORRECTION**   SERIAL NUMBER: _09/727,030_

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 _____ Wrapped Nucleics — The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".

2 _____ Wrapped Aminos — The amino acid number/text at the end of each line "wrapped " down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".

3 _____ Incorrect Line Length — The rules require that a line not exceed 72 characters in length. This includes spaces.

4 _____ Misaligned Amino Acid Numbering — The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs between the numbering. It is recommended to delete any tabs and use spacing between the numbers.

5 _____ Non-ASCII — This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.

6 _____ Variable Length — Sequence(s) _____ contain n's or Xaa's which represented more than one residue.
As per the rules, each n or Xaa can only represent a single residue.
Please present the maximum number of each residue having variable length and
indicate in the (ix) feature section that some may be missing.

7 _____ PatentIn ver. 2.0 "bug" — A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223> sections for Artificial or Unknown sequences.

8 _____ Skipped Sequences (OLD RULES) — Sequence(s) _____ missing. If intentional, please use the following format for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X:
(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).

9 _____ Skipped Sequences (NEW RULES) — Sequence(s) _____ missing. If intentional, please use the following format for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

10 _____ Use of n's or Xaa's (NEW RULES) — Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

11 _____ Use of <213>Organism (NEW RULES) — Sequence(s) _____ are missing this mandatory field or its response.

1-28 (and more)

12 ✔ Use of <220>Feature (NEW RULES) — Sequence(s) _____ are missing the <220>Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)

13 _____ PatentIn ver. 2.0 "bug" — Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other means to copy file to floppy disk.

OIPE

**Does Not Comply
Corrected Diskette Needed**

pp 1-5

```
 5 <110> APPLICANT: Patrick N. Gilles
 6           Patrick J. Dillon
 7           David J. Wu
 8           Charles B. Foster
 9           Stephen J. Chanock
12 <120> TITLE OF INVENTION: SINGLE NUCLEOTIDE POLYMORPHIC
13        DISCRIMINATION BY ELECTRONIC DOT BLOT ASSAY ON
14        SEMICONDUCTOR MICROCHIPS
17 <130> FILE REFERENCE: 259/163-US
20 <140> CURRENT APPLICATION NUMBER: US/09/727,030
20 <141> CURRENT FILING DATE: 2000-11-30
20 <150> PRIOR APPLICATION NUMBER: PCT/US00/08617
21 <151> PRIOR FILING DATE: 2000-03-28
23 <150> PRIOR APPLICATION NUMBER: 60/126,865
24 <151> PRIOR FILING DATE: 1999-03-30
27 <160> NUMBER OF SEQ ID NOS: 31
30 <170> SOFTWARE: FastSEQ for Windows Version 4.0
33 <210> SEQ ID NO: 1
34 <211> LENGTH: 140
35 <212> TYPE: DNA
36 <213> ORGANISM: Artificial Sequence
39 <220> FEATURE:
39 <223> OTHER INFORMATION:
39 <400> SEQUENCE: 1
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41 atgggcgtga tggcaccaag ggagaaaagg gggaaccagg tacgtgttgg gctgttctgt 120
42 ctctgcaatt ctttaccttc                                             140
45 <210> SEQ ID NO: 2
46 <211> LENGTH: 25
47 <212> TYPE: DNA
48 <213> ORGANISM: Artificial Sequence
51 <220> FEATURE:
51 <223> OTHER INFORMATION:
51 <400> SEQUENCE: 2
52 tgattgcctg tagctctcca ggcat                                        25
55 <210> SEQ ID NO: 3
56 <211> LENGTH: 28
57 <212> TYPE: DNA
58 <213> ORGANISM: Artificial Sequence
61 <220> FEATURE:
61 <223> OTHER INFORMATION:
61 <400> SEQUENCE: 3
62 ggtaaagaat tgcagagaga cgaacagc                                     28
65 <210> SEQ ID NO: 4
66 <211> LENGTH: 21
67 <212> TYPE: DNA
68 <213> ORGANISM: Artificial Sequence
```

global error

These numeric identifiers are MANDATORY whenever the <213> response is Unknown or Artificial Sequence

see item 12 on Error Summary Sheet

W--> (marks at lines 39, 39, 51, 51, 61, 61)

```
                RAW SEQUENCE LISTING              DATE: 12/12/2000
                PATENT APPLICATION:  US/09/727,030    TIME: 12:10:45

                Input Set : A:\240240us.txt
                Output Set: N:\CRF3\12122000\I727030.raw

W--> 71 <220> FEATURE:
W--> 71 <223> OTHER INFORMATION:
     71 <400> SEQUENCE: 4
     72 caggcaaaga tgggcgtgat g                              21
     75 <210> SEQ ID NO: 5
     76 <211> LENGTH: 21
     77 <212> TYPE: DNA
     78 <213> ORGANISM: Artificial Sequence
W--> 81 <220> FEATURE:
W--> 81 <223> OTHER INFORMATION:
     81 <400> SEQUENCE: 5
     82 caggcaaaga tgggtgtgat g                              21
     85 <210> SEQ ID NO: 6
     86 <211> LENGTH: 21
     87 <212> TYPE: DNA
     88 <213> ORGANISM: Artificial Sequence
W--> 91 <220> FEATURE:
W--> 91 <223> OTHER INFORMATION:
     91 <400> SEQUENCE: 6
     92 caggcaaaga tgggagtgat g                              21
     95 <210> SEQ ID NO: 7
     96 <211> LENGTH: 21
     97 <212> TYPE: DNA
     98 <213> ORGANISM: Artificial Sequence
W--> 101 <220> FEATURE:
W--> 101 <223> OTHER INFORMATION:
     101 <400> SEQUENCE: 7
     102 caggcaaaga tgggggtgat g                             21
     105 <210> SEQ ID NO: 8
     106 <211> LENGTH: 22
     107 <212> TYPE: DNA
     108 <213> ORGANISM: Artificial Sequence
W--> 111 <220> FEATURE:
W--> 111 <223> OTHER INFORMATION:
     111 <400> SEQUENCE: 8
     112 tgatggcacc aagggagaaa ag                            22
     115 <210> SEQ ID NO: 9
     116 <211> LENGTH: 22
     117 <212> TYPE: DNA
     118 <213> ORGANISM: Artificial Sequence
W--> 121 <220> FEATURE:
W--> 121 <223> OTHER INFORMATION:
     121 <400> SEQUENCE: 9
     122 tgatgacacc aagggagaaa ag                            22
     125 <210> SEQ ID NO: 10
     126 <211> LENGTH: 22
     127 <212> TYPE: DNA
     128 <213> ORGANISM: Artificial Sequence
W--> 131 <220> FEATURE:
```

```
                 RAW SEQUENCE LISTING              DATE: 12/12/2000
                 PATENT APPLICATION:  US/09/727,030   TIME: 12:10:45

                 Input Set : A:\240240us.txt
                 Output Set: N:\CRF3\12122000\I727030.raw

W--> 131  <223> OTHER INFORMATION:
     131  <400> SEQUENCE: 10
     132  tgatgtcacc aagggagaaa ag                            22
     135  <210> SEQ ID NO: 11
     136  <211> LENGTH: 22
     137  <212> TYPE: DNA
     138  <213> ORGANISM: Artificial Sequence
W--> 141  <220> FEATURE:
W--> 141  <223> OTHER INFORMATION:
     141  <400> SEQUENCE: 11
     142  tgatgccacc aagggagaaa ag                            22
     145  <210> SEQ ID NO: 12
     146  <211> LENGTH: 22
     147  <212> TYPE: DNA
     148  <213> ORGANISM: Artificial Sequence
W--> 151  <220> FEATURE:
W--> 151  <223> OTHER INFORMATION:
     151  <400> SEQUENCE: 12
     152  tgatggcacc aagggagaaa ag                            22
     155  <210> SEQ ID NO: 13
     156  <211> LENGTH: 22
     157  <212> TYPE: DNA
     158  <213> ORGANISM: Artificial Sequence
W--> 161  <220> FEATURE:
W--> 161  <223> OTHER INFORMATION:
     161  <400> SEQUENCE: 13
     162  tgatggcacc aaggaagaaa ag                            22
     165  <210> SEQ ID NO: 14
     166  <211> LENGTH: 22
     167  <212> TYPE: DNA
     168  <213> ORGANISM: Artificial Sequence
W--> 171  <220> FEATURE:
W--> 171  <223> OTHER INFORMATION:
     171  <400> SEQUENCE: 14
     172  tgatggcacc aaggtagaaa ag                            22
     175  <210> SEQ ID NO: 15
     176  <211> LENGTH: 22
     177  <212> TYPE: DNA
     178  <213> ORGANISM: Artificial Sequence
W--> 181  <220> FEATURE:
W--> 181  <223> OTHER INFORMATION:
     181  <400> SEQUENCE: 15
     182  tgatggcacc aaggcagaaa ag                            22
     185  <210> SEQ ID NO: 16
     186  <211> LENGTH: 23
     187  <212> TYPE: DNA
     188  <213> ORGANISM: Artificial Sequence
W--> 191  <220> FEATURE:
W--> 191  <223> OTHER INFORMATION:
```

```
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        192 aaattttgcc acctcgcctc acg                              23
        195 <210> SEQ ID NO: 17
        196 <211> LENGTH: 23
        197 <212> TYPE: DNA
        198 <213> ORGANISM: Artificial Sequence
W--> 201 <220> FEATURE:
W--> 201 <223> OTHER INFORMATION:
        201 <400> SEQUENCE: 17
        202 agtcccggag cgtgcagttc agt                              23
        205 <210> SEQ ID NO: 18
        206 <211> LENGTH: 24
        207 <212> TYPE: DNA
        208 <213> ORGANISM: Artificial Sequence
W--> 211 <220> FEATURE:
W--> 211 <223> OTHER INFORMATION:
        211 <400> SEQUENCE: 18
        212 tcttcttcga cacatgggat aacg                             24
        215 <210> SEQ ID NO: 19
        216 <211> LENGTH: 24
        217 <212> TYPE: DNA
        218 <213> ORGANISM: Artificial Sequence
W--> 221 <220> FEATURE:
W--> 221 <223> OTHER INFORMATION:
        221 <400> SEQUENCE: 19
        222 tcttctttga cacatgggat aacg                             24
        225 <210> SEQ ID NO: 20
        226 <211> LENGTH: 24
        227 <212> TYPE: DNA
        228 <213> ORGANISM: Artificial Sequence
W--> 232 <220> FEATURE:
W--> 232 <223> OTHER INFORMATION:
        232 <400> SEQUENCE: 20
        233 tcttcttaga cacatgggat aacg                             24
        236 <210> SEQ ID NO: 21
        237 <211> LENGTH: 24
        238 <212> TYPE: DNA
        239 <213> ORGANISM: Artificial Sequence
W--> 242 <220> FEATURE:
W--> 242 <223> OTHER INFORMATION:
        242 <400> SEQUENCE: 21
        243 tcttcttgga cacatgggat aacg                             24
        246 <210> SEQ ID NO: 22
        247 <211> LENGTH: 24
        248 <212> TYPE: DNA
        249 <213> ORGANISM: Artificial Sequence
W--> 252 <220> FEATURE:
W--> 252 <223> OTHER INFORMATION:
        252 <400> SEQUENCE: 22
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RAW SEQUENCE LISTING   DATE: 12/12/2000
PATENT APPLICATION: US/09/727,030   TIME: 12:10:45

        Input Set : A:\240240us.txt
        Output Set: N:\CRF3\12122000\I727030.raw

```
       253  cttctctgtc tctgactctc catc                          24
       256  <210> SEQ ID NO: 23
       257  <211> LENGTH: 20
       258  <212> TYPE: DNA
       259  <213> ORGANISM: Artificial Sequence
W-->   262  <220> FEATURE:
W-->   262  <223> OTHER INFORMATION:
       262  <400> SEQUENCE: 23
       263  caaggtgagc agagggagac                               20
       266  <210> SEQ ID NO: 24
       267  <211> LENGTH: 21
       268  <212> TYPE: DNA
       269  <213> ORGANISM: Artificial Sequence
W-->   272  <220> FEATURE:
W-->   272  <223> OTHER INFORMATION:
       272  <400> SEQUENCE: 24
       273  ttctgccatg attcctctct g                             21
       276  <210> SEQ ID NO: 25
       277  <211> LENGTH: 21
       278  <212> TYPE: DNA
       279  <213> ORGANISM: Artificial Sequence
W-->   282  <220> FEATURE:
W-->   282  <223> OTHER INFORMATION:
       282  <400> SEQUENCE: 25
       283  ttctgccatg gttcctctct g                             21
       286  <210> SEQ ID NO: 26
       287  <211> LENGTH: 21
       288  <212> TYPE: DNA
       289  <213> ORGANISM: Artificial Sequence
W-->   292  <220> FEATURE:
W-->   292  <223> OTHER INFORMATION:
       292  <400> SEQUENCE: 26
       293  ttctgccatg tttcctctct g                             21
       296  <210> SEQ ID NO: 27
       297  <211> LENGTH: 21
       298  <212> TYPE: DNA
       299  <213> ORGANISM: Artificial Sequence
W-->   302  <220> FEATURE:
W-->   302  <223> OTHER INFORMATION:
       302  <400> SEQUENCE: 27
       303  ttctgccatg cttcctctct g                             21
       306  <210> SEQ ID NO: 28
       307  <211> LENGTH: 25
       308  <212> TYPE: DNA
       309  <213> ORGANISM: Artificial Sequence
W-->   312  <220> FEATURE:
W-->   312  <223> OTHER INFORMATION:
       312  <400> SEQUENCE: 28
       313  gttagaagga aacagaccac agacc                         25
```

FYI:

**The types of errors shown exist <u>throughout</u> the Sequence Listing. Please check
subsequent sequences for similar errors.**

```
VERIFICATION SUMMARY              DATE: 12/12/2000
PATENT APPLICATION:  US/09/727,030   TIME: 12:10:46

Input Set : A:\240240us.txt
Output Set: N:\CRF3\12122000\I727030.raw

L:20 M:270 C: Current Application Number differs, Replaced Current Application No
L:20 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:39 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:39 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:51 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:51 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:61 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:61 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:71 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:71 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:81 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:81 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:91 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:91 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
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L:232 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
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VERIFICATION SUMMARY              DATE: 12/12/2000
PATENT APPLICATION:  US/09/727,030      TIME: 12:10:46

     Input Set : A:\240240us.txt
     Output Set: N:\CRF3\12122000\I727030.raw

L:272 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:272 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
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L:282 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
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